

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

INDEXED.

1915

FEB 6 - 1915

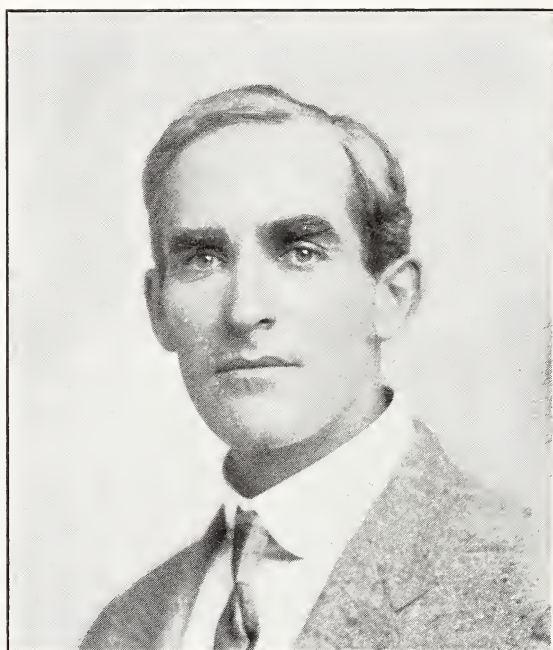
LIBRARY
RECEIVED
★ SEP 13 1920 ★
U. S. DEPARTMENT OF AGRICULTURE

A Few
Things Worth While
and Some Suggestions




Five-Year-Old Jonathan in Bearing

A FEW
Things Worth While
and Some Suggestions



By
George R. Murray
Horticulturist and Nurseryman
OREGON, MISSOURI



Introductory

With thanks to each of our patrons for all past favors, we assure you it is our desire to give everyone the very best stock and the best service of which we are capable; and on this basis we ask a continuance of your valued patronage. We do not grow a complete line of nursery stock. We know, from many years of experience (during which we have grown hundreds of thousands of fruit trees for both wholesale and retail trade), that the number of fruits that are really "worth while" in any section of the country is limited to a comparatively few. While we have a great fruit country here in the "loess" region, yet there are hundreds of varieties of fruits that it would be unwise to plant.

The present normal and healthy demand for fruit trees and plants of high quality, though increasing steadily year by year, does not justify us in growing apple trees "by the million," peach trees "by the trainload," nor ornamental stock by the "square mile."

I would rather send out annually fifty thousand good, strong, healthy fruit trees of "gilt edged" quality, and have the confidence of every patron, than to conduct a business requiring the services of an army of canvassers gathering in the people's money in a way that too often veils the "square deal" policy and lightly regards the term "value received."

GUARANTEE OF GENUINENESS

While the greatest diligence and care to have all trees, etc., true to label, will be exercised, mistakes may occur, and, in such cases, upon proper proof, the trees, etc., will be replaced free of charge, or the amount refunded; but it is mutually understood and agreed to between the purchaser and ourselves that the guarantee of genuineness shall in no case make us liable for any sum greater than that originally paid for the trees, etc., that proved untrue, nor for damage.

THE SHIPPING SEASON

There can be no definite time specified for beginning to ship, either in the spring or fall. That is regulated by the opening of the spring—early or late, and by the ripening of the stock in the fall; as the season for planting is not regulated so much by any particular month or day, nor by the state of vegetation, but more particularly by the condition of the trees to be planted. It is therefore better that orders be sent in early so the stock can be shipped or delivered at the proper season in good condition.

NO CHARGE FOR PACKING ANY SIZED ORDER. WE ALSO PAY THE FREIGHT OR EXPRESS

on all orders amounting to \$5.00 or more, to all railroad points in northwest Missouri, northeast Kansas, southwest Iowa and southeast Nebraska, when cash accompanies the order.

REPLACING AT HALF PRICE

We furnish you the very best whole rooted stock that can be grown. Quality considered, our prices are as low as other responsible nurseries, and lower than most of them; besides you get our stock fresh and in fine, thrifty condition. We guarantee every tree and plant to be in good condition when it leaves our hands; furthermore **we replace all stock** that dies the first year, when given proper care, at **one-half** of our printed retail prices.

REMIT by personal check or in any way that is convenient. Your check is good here.

HINTS ON TRANSPLANTING

The natural place for the roots of trees and plants is in the ground, and as soon as they are exposed to the atmosphere and become too dry, they begin to lose their vitality; therefore, let it be kept in mind that too much care cannot be taken to protect their life and vitality while out of the ground, as a failure in this is often the cause of a feeble growth when transplanted. Poor growth is also caused by not having the ground in proper condition at time of transplanting and a lack of after-cultivation.

Soil; Its Preparation, Exposure, Etc. Any soil that will grow good crops of corn and small grain will answer for fruit trees, etc. Eastern and northern exposures are usually considered the best, but perhaps more depends on the quality of the soil and its preparation and after-cultivation than on the exposure. If the ground is naturally wet, spouty and cold, artificial draining is necessary before planting. Any ground should be well prepared by fall plowing. On good, rich soil, manuring will be unnecessary, but on thin or poor soil,

THINGS WORTH WHILE AND SOME SUGGESTIONS

barnyard manure should be applied freely. Never grow small grain in the orchard, but always some crop that will require thorough cultivation, and the rows of trees should be kept cultivated at least until the latter part of August.

Transplanting. When the trees are received, open the bundles and heel in, so that mellow earth will come in contact with all the roots. It may be necessary to apply water to moisten the soil. Before planting, the ends of all bruised and broken roots should be cut, sloping from the under side. If the soil is properly prepared, the holes need not be dug much larger than to receive the roots in their original position. In planting in sod, in yard or lawn, the hole should be dug 4 to 6 feet in diameter and a little deeper than is necessary to set the tree, always using good mellow soil in filling in, pressing the ground well about the roots, and in such a manner as to leave them in their natural position as much as possible. Water freely used in planting helps to settle the earth about the roots. Mulching, as soon as the tree is planted, 3 or 4 inches thick, and 4 to 6 feet in diameter, should be applied, but the earth should be well pressed about the tree before applying the mulching.

Depth to Plant. About the only correct guide that can be given in regard to the depth to be planted is that when the ground is well pressed about the tree or plant, it will be as deep or a little deeper than it stood in the nursery; and in this it is well to bear in mind that the roots of some trees, such as the standard pear, strike their roots deep, and require a deep hole, even to plant them as deep as they were in the nursery. Dwarf trees should be planted so that all the stock on which they are worked will be well under ground.

Cultivation. Clark's Cut-Away Disc Harrow is, by all odds, the best implement yet devised for orchard culture. With it a man and two good horses can cultivate from 8 to 12 acres of orchard a day, and by cross cultivating the opposite way about a week later, and continuing this good work throughout the season, an ideal dust mulch, 3 to 4 inches deep, can easily be maintained, at a light cost. This will guarantee your orchards against injury by drouth, besides developing fine crops of fruit. This is no guesswork. We have tried it out, and no orchard practice has ever paid us better.

The Dust Mulch. Saving the moisture is one of the prime essentials in successful horticulture, as well as agriculture. To do this, we ought to do most of our plowing in the fall. Fall plowing is the first step to safeguard against a drouth. This fills the soil with rain and snow water during the winter. This water can be kept in the soil during the spring and summer by judicious and constant stirring. If the soil is left uncultivated in a little while a crust will form on the surface, and then evaporation goes on very rapidly. The plow, the harrow and the disc should be used frequently. Every time the surface is torn up by cultivation, the tops of the tiny tubes that are busy carrying the soil moisture up to the surface are snapped off and the evaporation is stopped. Capillary attraction pulls the water to the surface, but the connection is broken every time the surface soil is stirred. This is the only practical way to safeguard our orchards against drouth; and no other plan of which we have any knowledge will begin to compare with *intensive culture* as a matter of a good investment, when intelligently applied to orchard work—in the making of bumper crops of fancy fruit.

NUMBER OF TREES TO AN ACRE

| | | | |
|-----------------------------|-----|-----------------------------|-------|
| 30 feet apart each way..... | 50 | 10 feet apart each way..... | 345 |
| 25 feet apart each way..... | 70 | 8 feet apart each way..... | 684 |
| 20 feet apart each way..... | 110 | 6 feet apart each way..... | 1,210 |
| 18 feet apart each way..... | 135 | 5 feet apart each way..... | 1,742 |
| 15 feet apart each way..... | 205 | 4 feet apart each way..... | 2,723 |
| 11 feet apart each way..... | 300 | 3 feet apart each way..... | 4,840 |

Rule—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet for each plant or hill, which, divided into the number of feet in an acre, 43,560, will give the number of trees in an acre.

SUITABLE DISTANCES FOR PLANTING

| | |
|----------------------------------------------------|----------------------------------------|
| Standard Apples | 30 feet each way |
| Standard Pears and strong growing Cherries..... | 20 feet each way |
| Standard Plums, Apricots, Peaches, Nectarines..... | 16x20 feet |
| Dwarf Pears | 10 to 12 feet each way |
| Grapes | rows 8 feet apart, 4 to 6 feet in rows |
| Strawberries, for field culture | 1x4 feet |
| Strawberries, for garden culture..... | 1x2 feet |
| Raspberries | rows 6 feet apart, 2½ feet in rows |
| Blackberries | rows 8 feet apart, 2½ feet in rows |

Apples

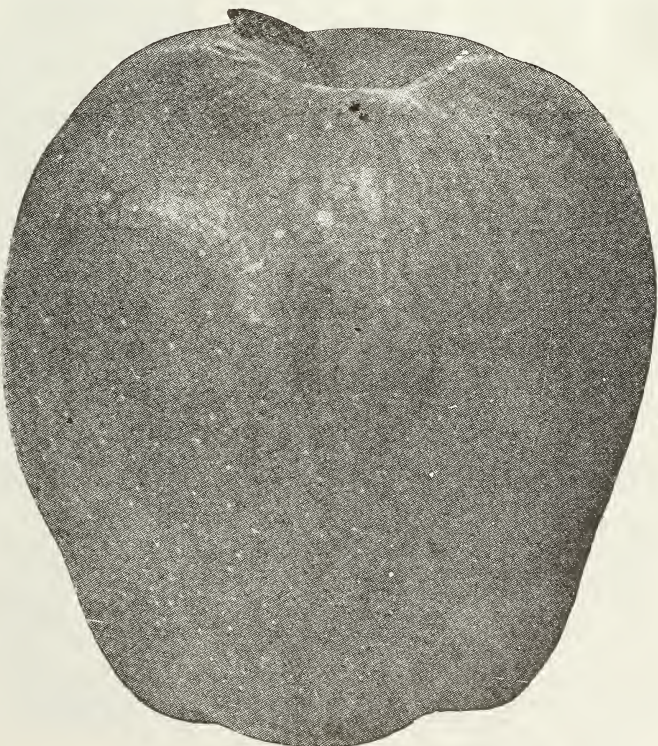
The Apple is the first in importance of all fruits. It will thrive on nearly any well-drained soil. Its period of ripening, unlike other fruits, extends nearly through the whole year. By making careful selection, a constant succession can be obtained. For family use there is no fruit that is so indispensable. No fruit is so healthful, and many physicians say that if a person would eat an apple a day, they could dispense with doctor bills. Besides this, it is a fact that the average price on the market is steadily increasing and the immense demand for home consumption and foreign shipping assures high prices. The apple, if given care and attention, will yield a good income nearly every year after it reaches bearing age.

Here's to the Apple, King of Fruits—
 Fine as a god could wish—
 With its red, and green, and gold,
 (Superbly tempting dish)!

Here's to the apple lovers all,
 To those who grow and sell:
 Here's to the happy country folk
 Who 'midst the fruit trees dwell!

Delicious. In quality unsurpassed; flavor almost like a pear, nearly sweet, but with just a faint trace of acid, fine grained, very juicy, crisp and fragrant; color a brilliant red, shading into a rich yellow at blossom end. We have not heretofore advised planting the Delicious on a large scale commercially, as we were watching its habits of growth and fruiting; but do not now hesitate to advise our friends to plant a good per cent of this variety for the fancy apple trade. It is a good "running mate" for "Brother Jonathan," and that's "going some." The tree is a strong, vigorous grower, very productive, and bears young; may now be found coming into bearing in some part of nearly every county of northwest Missouri and southwest Iowa. Sept. to March.

Jonathan. The standard of quality by which other sorts are gauged. Seedling of Spitzenburg, but of far wider adaptability. Medium size, deep rich red; tender, juicy, spicy, rather acid but rich. An excellent family apple, and highly profitable for market—sells as high or higher than any other. Slender in nursery, but makes a



Delicious

THINGS WORTH WHILE AND SOME SUGGESTIONS

large, long-lived, productive orchard tree. Should be planted with other sorts for cross-pollination—in fact, it is always safer to plant several sorts rather than large blocks of any one variety. Jonathan and all apples which do not hang well until October 1, as well as summer and fall sorts, keep far better if picked as soon as seeds are brown. Fancy Jonathan and other high quality sorts, carefully graded and packed, are in great demand by first-class fruit stores in all the large cities and such fruit always tops the market. The grower of Jonathan, Grimes, Delicious, etc., need never worry about glutted markets—they do not exist for high quality fruit. Sept. to March.

Grimes Golden. A favorite for 40 years and gaining in popularity. Medium size, golden yellow; flesh yellow, tender, juicy, spicy, rich. Rapid, vigorous grower, stands drouth; late bloomer, young and regular bearer. Ripens about with Jonathan; not a long keeper—should be picked early for cold storage. A most profitable sort, a favorite in all markets, and invariably brings highest prices.

Stayman's Winesap. Winter. (Originated from a seed of the Winesap.) Medium to large; yellow covered with red, fine grained, tender, juicy, subacid. Ripens in December, lasts to May.

Northwestern Greening. Has been fruiting 25 years in central Wisconsin, where it originated. At the St. Louis World's Fair, Iowa made one of the best apple exhibits, in which N. W. Greening was the most conspicuous sort. Large to very large, greenish yellow; flesh white, juicy, slightly subacid, quality good. Strong, erect grower; not a heavy bearer while young, but productive later. Oct. to March.

Rome Beauty. (Winter.) A very fine market variety for the Northern and Western states. Fruit very large, skin yellow, mottled with bright red; in highly colored specimens almost solid red on exposed cheek, striped with bright carmine. Flesh crisp, juicy, agreeable, mild, subacid. Ripens in November, lasts till April or May.

Huntsman. Large, round, somewhat angular; color a pale yellow, with faint blush; very attractive; flesh yellow, mild, sweet and very good. December to March.

Jeniton (Rall Janet). Originated in Amherst County, Va., on farm of Caleb Rall. Medium, striped dull red, subacid, very good when well grown. Once the most extensively grown market and family apple in the West, and still one of the best if given good culture and not allowed to overbear. Blooms much later than most sorts. Nov. to June.

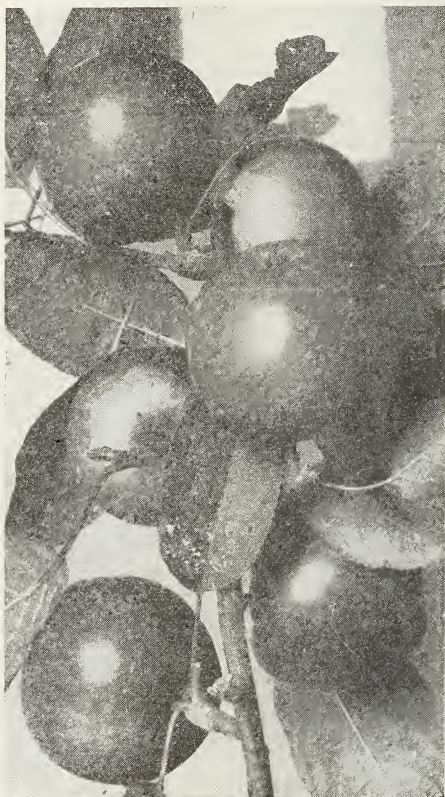
Duchess of Oldenburg. (Fall.) Very valuable because of its great hardness. Fruit

large, firm, crisp, tender, juicy, subacid. Skin pale yellow, striped with red. Tree medium size, vigorous and hardy. Ripens late in August and early in September.

Yellow Transparent. (Summer). One of the best extra early varieties. Excellent for both culinary use and dessert. Fruit large, crisp, tender, juicy, subacid. Skin yellowish-white. Tree medium size, vigorous and hardy. Ripens in July and August.

Winter Banana. (Winter.) A magnificent dessert apple, which, on account of its attractive appearance and fine quality commands a readier sale and higher prices than most apples. Packed in boxes for the fancy trade, it is in ready demand. The fruit is large and keeps all winter. Flesh whitish, tinged with pale yellow, firm, crisp, tender, subacid. Skin clear pale yellow with beautiful pinkish red blush. Tree vigorous and hardy. Ripens in December, lasts until April.

Red June. (Summer.) An attractive little apple, deep red over yellow, tender, brisk, subacid. June and July.



Red June

Winesap. (Winter.) A well-known popular dark red variety of medium size, firm, crisp, juicy, subacid. Ripens in January, lasts to June.

Mammoth Black Twig. A seedling of Winesap, but excels it in every important point; a better and much stronger grower, hardier, and the fruit much larger, often measuring 12 inches in circumference; color even a darker red; flesh firmer; flavor milder, but fully equal. Remarkably hardy and a long keeper.

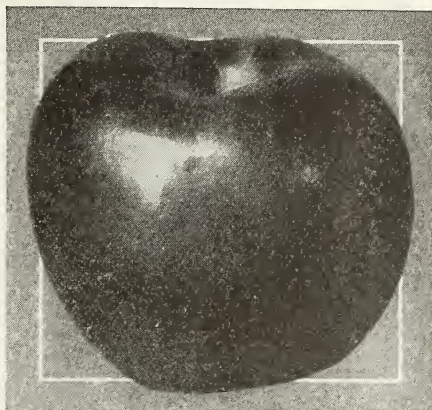
Pound Sweet (Pumpkin Sweet). (Winter). By many it is considered the best variety of its season for baking, canning or stewing with quinces. Fruit very large, crisp, decidedly sweet with a peculiar flavor. Skin clear yellow marbled with greenish-yellow. Tree large, vigorous and hardy. Ripens in October.

Roman Stem. Medium, round, whitish-yellow, with blush and russet dots; flesh tender, juicy and fine; good quality. A good dessert apple. October to January.

York Imperial. Large, oval, greenish-yellow, nearly covered with bright red, flesh tender, crisp, juicy and aromatic. Enormous bearer, hangs well on tree; good keeper.

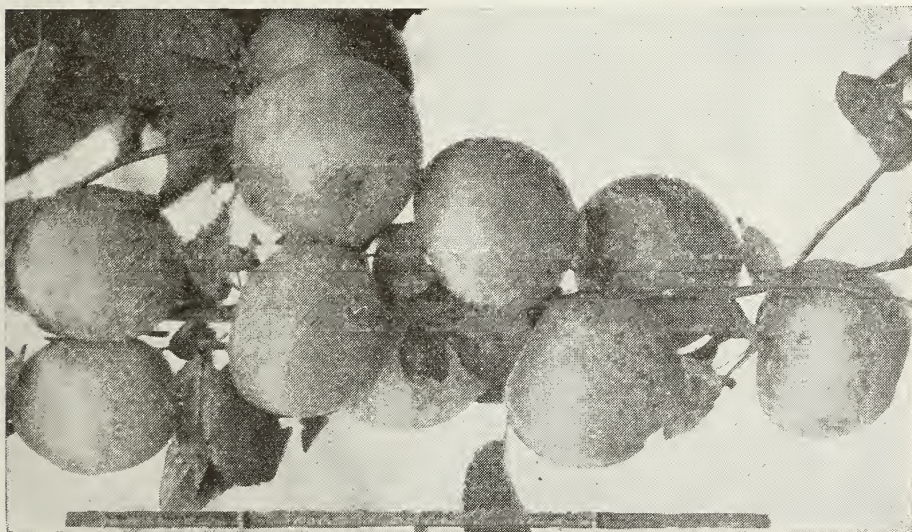
Yellow Bellflower. Large to very large, oblong; pale yellow with blush; flesh rich, good and subacid; tree hardy and a good grower, but a shy bearer. Oct. to Jan.

Liveland Raspberry. Everything consid-

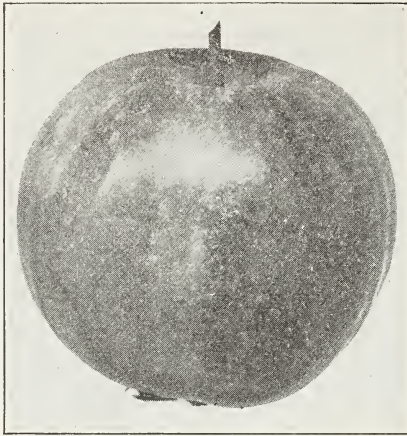


Stayman Winesap

ered, probably the most valuable of all the apples imported from Russia. Medium to large, clear waxen white, shaded and marbled crimson—surpassingly beautiful fruit. Flesh snow white, frequently tinged pink, tender, fine grained, crisp, juicy, very sweet and rich, not a common trait in so early an apple. Ripens with Yellow Transparent, but covers a much longer season. Hardy, long lived, moderately strong grower, much less subject to blight than most of the Russians. Of wide adaptability, succeeds South as well as far North. Too delicate and tender to stand long shipment in barrels, but ideal for home use or to market in baskets. July, Aug.



Winter Banana



Hyslop Crab

Early Harvest. An old favorite. Medium to large; a bright yellow; flesh juicy, crisp and well flavored. June and July.

Red Astrachan. (Summer.) A reliable cropper that comes into bearing young. Fruit medium size, crisp, tender, juicy, subacid. Skin pale yellow striped with deep crimson, covered with a distinct bluish bloom. Tree medium size, vigorous and hardy. Ripens in July and August.

Benoni. Medium size, covered with bright red stripes and splashes. Flesh yellow, tender, juicy, aromatic. Tree upright, hardy, productive. July, Aug.

Golden Sweet. Rather large; pale yellow; very sweet and good; strong grower and good bearer. August.

Sweet Bough. (Summer.) This is a universal favorite for the "home orchard." Fruit large, moderately firm, crisp, tender, juicy, sweet. Skin smooth, pale greenish yellow, sometimes blushed. Tree vigorous, long lived. Season August to early September.

Wealthy. This variety is particularly valuable because the tree is hardy and the fruit sells well, and is good in quality for either dessert or culinary uses. It is gaining in popularity each year on account of its beauty and quality. Fruit large, fine, crisp, tender, very juicy, agreeably subacid. Skin pale yellow, blushed and marked with narrow stripes and splashes of red, deepening to brilliant red. Prevailing effect "bright red." Tree medium, upright, spreading, thrifty grower. Ripens in September.

Rambo. Medium, yellowish-white with dull red streaks; mild, tender and good; tree a fine grower, productive. A good apple for the Middle West. Oct. to Dec.

We have many other varieties not listed here. If you do not see what you want, ask for it.

Crab Apples

Hyslop. Almost as large as Early Strawberry apple. Deep crimson; very popular on account of its size, beauty and hardness; tree vigorous.

Whitney. Large, glossy green, splashed with crimson; flesh firm, juicy; flavor very pleasant; tree a good bearer and very hardy; ripens last of August.

Stock received and all O. K. Inclosed find check. Many thanks.

ROY DeBORD, Maryville, Mo.



The Ideal Dust Mulch



The Golden Harvest

Peaches

The peach is queen of fruits. Its rich and unsurpassed flavor, delicious sweets and acids, beautiful and gorgeous tints and colors, graceful shapes and forms, make it the universal favorite everywhere. The peach is at home over a greater area of the earth's surface than any other variety of fruit. Its many varieties furnish a long ripening period, extending from June to October, giving a continual supply to local and distant markets and suitable for table, cooking, canning, drying, and preserving. Peach trees should be set 16x20 feet apart in soil well prepared before trees are set. The tree should be well cultivated, pruned, sprayed, and the bodies treated occasionally to prevent borers. Head trees close to ground not above 24 to 30 inches. When trees are received, as preparation to planting, prune all branches to within one inch of main stem and head not higher than thirty inches above ground. Shorten all roots to within four to six inches and set tree about two inches deeper than it stood in the nursery row, tightening thoroughly each tree in place. The following year after setting "rub off" all shoots except those wanted for making a well balanced top. Do not allow more growth on one side of tree than on the other or the result will be a "lop-sided," unsightly tree, instead of one well balanced and beautiful.

To secure healthy, vigorous and fruitful peach trees, it requires a well-drained, moderately rich soil, which must be kept clean and mellow. Peaches are all borne on wood of the previous season's growth, and this makes it advisable to prune the trees every year or two, so as to preserve a round, vigorous head. Remove all dead branches. The land should not be seeded to grass, but kept in constant cultivation.

The following have been selected as the best varieties. They furnish a succession, commencing about July 1st.

Alexander Early. Large, sometimes measuring 8 inches in circumference; nearly round; deep maroon, covered with rich tints of crimson; flesh white, juicy, vinous and firm, adhering slightly to the stone. Should remain on the tree until fully ripe. Last of June.

Amsden. Medium; red, shaded and mottled with dark red, nearly covering the greenish white ground. If left to ripen on the tree, the flesh is white, with a delicious flavor. Middle to end of June.

Greensboro. The largest and most beautiful of all early peaches. It is covered with light and dark crimson, shaded with yellow; flesh is white, juicy and good, and parts clean from the seed when fully ripe. First of July.

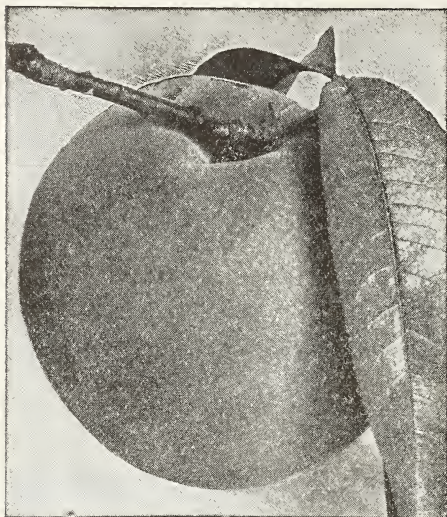
Carman. Large, resembling the Elberta in shape. Creamy white or pale yellow, with

deep blush; skin tough; its flesh is white, rich, tender and melting. One of the hardest in bud. Fine for shipping and is considered one of the best for market. July 15.

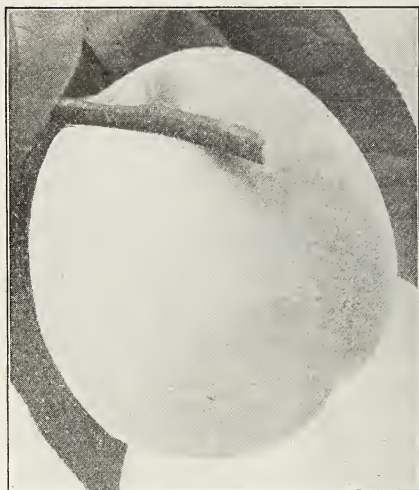
Mountain Rose. A superb early, white fleshed peach, which yearly adds to its reputation as the best of its season for home or market. Red; rich, juicy, excellent. Free. July.

Fitzgerald. Originated on the north shore of Lake Ontario, and in that cold region the original tree bore five successive crops. Of very large size, magnificent quality and a perfect freestone. Skin bright yellow, suffused with red; flesh deep yellow. The tree bears the second year from planting. Aug. 10.

Champion. (Freestone.) Ripens about August 10th. An excellent, showy white peach. Fruit large, creamy-white with beautiful red cheek. Sweet, tender, juicy, of very high



Champion



Elberta

quality and a good shipper. Trees are hardy and productive. Hardier, more productive and reliable than J. H. Hale or any other known variety. In 1913 our Champion orchard brought us \$290 per acre at our packing house and depot, and in 1914, \$150 per acre from the same trees. When properly located and managed, a good peach orchard of Champions, Mountain Rose, Carmen, Fitzgerald, Crosby, Old Mixon Cling, and Heath Cling may fairly and reasonably be expected to produce five or six-paying crops in ten years after reaching bearing age. Elberta is a grand market peach, but in this latitude we must figure on some Elberta failures in years when the more hardy varieties are yielding profitable crops.

Elberta. Introduced from Georgia. A cross between Crawford and Chinese Cling. Very large. It is the ideal market peach, and a royal fruit from its yellow and red skin to its red stone. The fruit is perfectly free from rot, and one of the most successful shipping varieties. Freestone. Aug. 20.

Stump-the-World. Large, roundish; creamy white, with red cheek; flesh white, juicy, highly flavored. Free. End of Aug.

Crosby. Fruit medium size; bright orange yellow, streaked with carmine; flesh rich, luscious and sugary. An excellent market sort on account of its handsome appearance. Claimed to be the hardiest of all peaches. Freestone with an exceedingly small pit. Sept. 10.

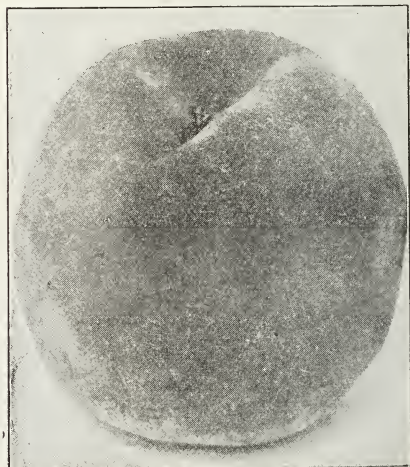
Heath Cling. Large, oblong; creamy white, slightly tinged with red in the sun; tender, juicy, melting, rich and luscious. A popular sort. Sept. 15.

Salway. A rather large, roundish yellow freestone, with a deep marbled brownish cheek; the flesh is yellow, firm, juicy, rich and sugary. A late market variety. Last of Sept.

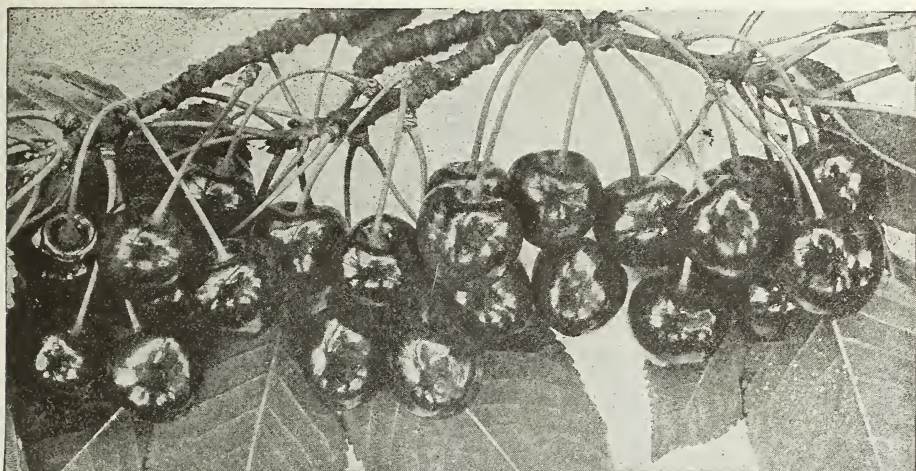
Old Mixon Cling. Large; pale yellow with deep red cheek; juicy, rich and high-flavored. A favorite clingstone. Aug. 20.

The strawberries were in our mail box yesterday when we went to town. They came in fine condition. I am sending a check for the plants, and any time we want any nursery stock, we will send to you. I expect we will want some trees next spring.

MRS. O. E. CAYWOOD,
Skidmore, Mo.



Greensboro



Early Richmond

Cherries

The Cherry is one of the finest and most desirable of the dessert fruits. The trees are very ornamental and when full of rich, ripe fruit, present a very beautiful and attractive appearance; besides a good orchard of Montmorencies is very profitable and always finds a ready market.

Early Richmond. Fruit medium size, juicy and acid, fine for cooking, and to eat when ripe; hardy and abundant bearer; popular. Trees of this variety planted in every district. The earliest cherry to ripen. The cherry is a dry-land tree—will thrive and do well on high, dry land—needs but little moisture. Fruit unsurpassed for cooking purposes. Ripens during June. Recommended by the State Horticultural Society.

Montmorency. Fruit ripens about ten days later than the Early Richmond. Fruit large, slightly lighter red color than Early Richmond; fine for cooking and canning. No matter how unfavorable the season, Montmorency can be depended upon for some fruit; flesh fine flavored, subacid, rich. Tree good, upright grower, not spreading like Early Richmond; hardy, vigorous and productive, growing in every locality. Ripens during July. Recommended by State Horticultural Society.

English Morello. A fine cherry, an old and valued sort. Tree a good and regular bearer; tree not so long lived as some others. Flesh deep red and very juicy; nearly black when ripe. Ripens in August. Recommended by the State Horticultural Society.

Compass Cherry. The new hybrid iron-clad cherry. A cross with our native sand

cherry that grows in the sand hills and the old hardy Minor plum. Fruit nearly an inch in diameter; has a small pit. Fine to eat off the tree. Where only a few are grown children generally have eaten all of them before fully ripe. When ripe a very dark red. Sweet, juicy and fine flavor. Good for canning. Tree absolutely hardy and growing fine and bearing where planted in the pure sand and also in the best of soils. Planted in Illinois and Iowa in great numbers. A heavy demand for them. Bears the next year after planting.

Sweet

Black Tartarian. Very large, bright purplish black, half tender, juicy, very rich, excellent flavor; productive; free. Ripens first to middle of July.

Governor Wood. Clear, light red, tender and delicious. Hangs well on the tree. End of June.

Fruit trees have arrived all O. K. Am very well pleased with them. Please find enclosed check for the amount, \$4.50, on the First Nat'l Bank of Savannah. Thanking you, I remain, Yours respectfully,

LEVI B. MOFFITT,
Savannah, Mo.



Plums

The Plum attains its greatest perfection on a strong clay soil, where it grows most thriftily, and suffers less from curculio and black knot. As is the case in all other fruits, it is greatly benefited by thorough cultivation. Plums should be sufficiently pruned to prevent straggling growth, and to prevent the head from being too crowded. They should be thoroughly cultivated and not allowed to stand in grass.

Abundance. One of the best Japanese plums. It is one of the imported varieties, being catalogued under the name of Abundance on account of its wonderful bearing qualities. The fruit is a lemon-yellow, nearly overspread with bright cherry, and with a heavy bloom; flesh orange-yellow, melting, rich and highly perfumed. The tree is an early and profuse bearer. July.

Burbank. A beautiful, large plum, of nearly globular form. The color is clear cherry-red, with a thin lilac bloom; flesh deep yellow, very sweet, with a peculiar and very agreeable flavor. The tree is vigorous, with strong, upright shoots, and commences to bear young. It blooms late and escapes the late spring frosts. Middle of Aug.

Red June. Medium to large; deep vermilion-red, with handsome bloom; flesh light lemon-yellow, slightly subacid, of good and pleasant quality; half-cling; pit small. The tree is vigorous, hardy, upright, spreading, and as productive as Abundance. One of the most valuable of the early varieties. August.

Shropshire Damson. One of the best for preserving; flesh amber colored; juicy and spicy; tree vigorous, hardy and an abundant bearer.

Lombard. Medium, round, oval, violet-red; juicy, pleasant and good; adheres to the stone. Tree vigorous and productive. Last of August. A valuable market variety; one of the most hardy and popular.

Yellow Egg. A very large and beautiful egg-shaped yellow plum; a little coarse, but excellent for cooking. Tree a free grower and very productive. End of August.

DeSoto. A hardy native sort; originated in Wisconsin; productive and profitable; a freestone, flesh solid, rich and sweet; in color a dark red. Produces well on young trees. Tree of ironclad hardness.

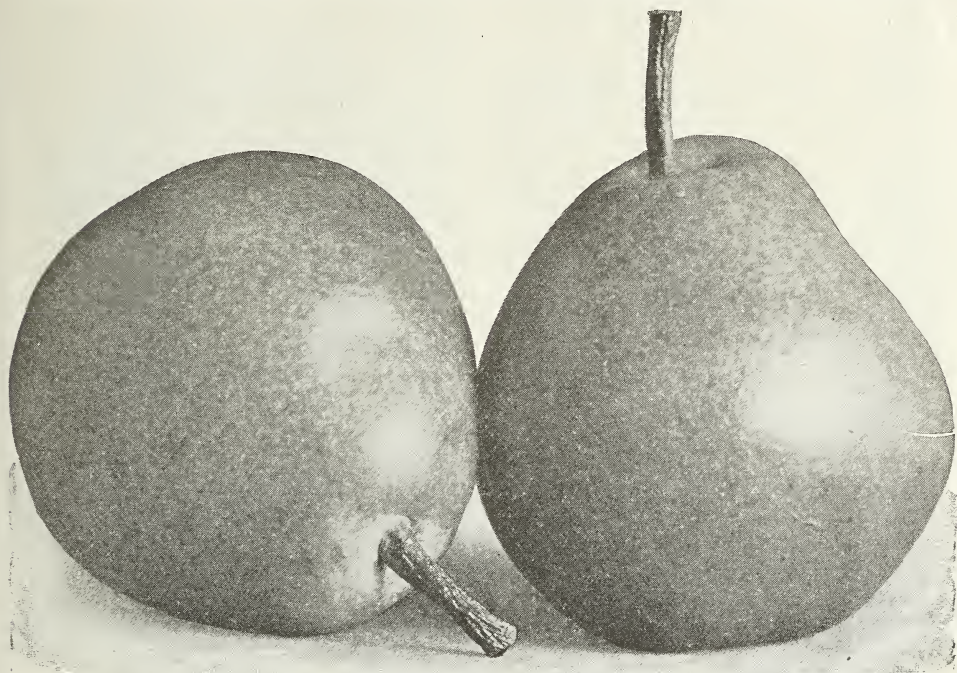
Wolf. Tree a splendid grower and hardy; fruit large, red in color; a freestone; splendid for eating and cooking. Ripens in August.

Wild Goose. Fruit medium size, red in color; flesh juicy; a clingstone. Tree thrifty growing; one of the best old native sorts. Ripens in July.

Pears

Bartlett. Large, often with a beautiful blush to the sun; buttery, juicy and high-flavored. The beauty, size and excellence of the fruit and productiveness of the tree leave little to be desired and make it very popular. Aug.

Seckel (Sugar Pear). Small, but of finest flavor; the standard of high quality among pears; hardy, seldom blights; long lived—original tree, more than 100 years old, still bears; dull, yellowish brown, almost covered with russet; juicy, tender, melting, buttery, sweet and rich. Aug., Sept.



Duchess. Very large, oblong, obovate, dull greenish yellow, flesh white, very juicy, buttery with a rich, excellent flavor. Tree a strong grower. Aug. and Sept.

Flemish Beauty. Large, beautiful, juicy, melting, rich and fine; good bearer. One of the hardiest and does well nearly everywhere. September and October.

Clapp's Favorite. A large pear, resembling the Bartlett. Skin yellowish green, changing to yellow when ripe, marbled with dull red in the sun, and covered with small russet dots; vinous, melting and rich. Tree hardy and very productive. July.

Kieffer. The Ben Davis among pears—no more, no less. Wonderful cropper. Four-year trees have yielded three bushels each of perfect fruit. It has PAID, and profit is a wonderful factor in deciding disputed points. Excellent for canning—thousands of cans are annually sold, labeled Bartlett; should be properly ripened, and not used until weeks after picked; let remain on the trees until leaves begin to fall, then carefully gather and allow to ripen in a cool, dark cellar, or other place of even temperature; is then juicy, crisp, good flavor; can be kept in cold storage till Jan. or Feb. Large, rich golden yellow, sometimes tinted red on one side; flesh very firm, coarse, granular. A most vigorous grower, usually quite free from blight. It is advisable to

mix in about 10 per cent Garber as pollinizers, rather than plant in solid blocks. East of the Rockies, has undoubtedly been the **MOST PROFITABLE OF ALL PEARS.** Standard only. Oct. to Jan.

Quinces

The Quince is becoming more popular every year as its good qualities and usefulness become known. It is productive, bears regular crops and is more sought for canning, with other fruits, as it imparts a delicious flavor. Will grow in any good garden soil, which should be kept mellow and enriched with stable manure once in a while. The tree is hardy, requires little space and comes into bearing early.

Champion. Very large and handsome; flesh cooks as tender as an apple and has a delicate flavor; makes a very handsome tree; fruit is a greenish-yellow.

Orange. Large, irregular; color a fine golden; flesh firm and cooks tender; excellent quality. One of the best.

Apricots

A rich and delicious fruit; belongs to the peach family and ripens just before it. The skin is smooth and a beautiful color. For drying and canning it has no superior. It

ships well and commands a good price on the market. It requires about the same cultivation as the peach.

Superb. A hardy seedling, originated in Kansas. An apricot of really excellent quality, worthy of wide planting in the territory where the tender European sorts will not thrive. Vigorous grower, heavy bearer, hardy in wood and bud. Medium, roundish oval; dull yellow, with thin, tough skin; flesh dull yellow, firm, subacid. July 5th.

Royal. A French variety and the leading apricot of the West. Strong grower, immensely productive—frequently overbears, runs small. A great favorite for canning and drying. Medium, oval; skin dull yel-

low with orange cheek, sometimes faintly tinged red; flesh pale orange, juicy, with a rich, vinous flavor. July 1.

Nectarines

The Nectarine is also of the peach family and resembles the apricot in its smooth skin. It is superior to the peach for drying and also makes excellent preserves. Requires the same cultivation as the peach.

Boston. Large, roundish, light yellow, with bright red cheek; flesh yellow, sweet and a peculiar flavor that is very pleasant. One of the best.



Delaware.

Diamond.

Wyoming Red

Niagara.

Grapes

White Varieties

Niagara. Best white grape; succeeds about everywhere. Very hardy, immensely productive. Bunch large and handsome, often shouldered, very compact. Berry large, round; skin thin, tough, does not crack; ships splendidly. When fully ripe is melting, sweet, with a flavor and aroma peculiarly its own—very agreeable to most tastes; sells well in all markets. Aug. 20.

Diamond. (Moore Diamond.) Most satisfactory early white. Vigorous, hardy and productive. Bunch large. Berry medium, greenish white, tinged yellow when fully ripe; very juicy, tender, melting, sweet. August 15.

Black Varieties

Concord. An old standard variety, succeeds everywhere, very productive; berry large, juicy; deep, glossy black. Season, September.

Moore's Early. Very popular for early market. Moderate grower, healthy and hardy; with good soil, high cultivation and pruned long is sufficiently productive. Same color and flavor as Concord. Aug. 12.

Worden. Large, earlier, richer, sweeter than Concord, of which it is evidently a seedling; ripens a few days earlier, not quite so good a shipper. Bunch very large, compact, handsome. Strong, vigorous grower, even harder than Concord. Aug. 16.

Campbell's Early. Origin Ohio. Of the



Moore's Early

Concord type, but ripens with, or slightly before, Moore's Early. Averages larger than Concord, better quality. Nearly round, large,

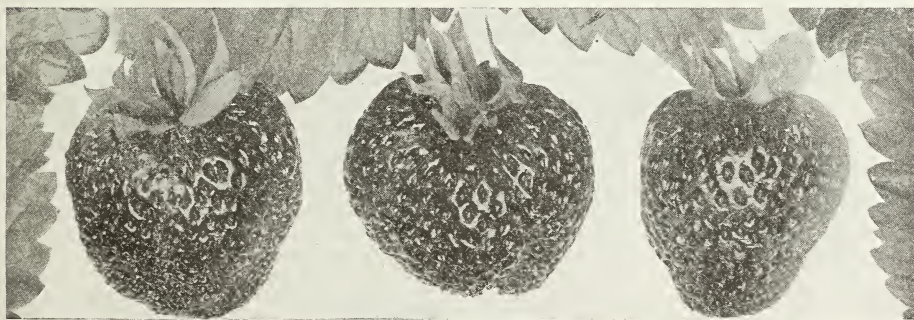
black with purple bloom; flesh firm, but tender; seeds few, easily separated from pulp. Strong, vigorous grower, moderate bearer. Does not crack or shell; fine shipper. Hangs several weeks after ripe. Aug. 12.

Red Varieties

Woodruff (Woodruff Red.) Originated in Michigan. An excellent market grape—bunch large, compact, rather short. Berries very large, beautiful bright red, handsome and attractive. Skin thick and strong. Good bearer, hardy. Fair quality, though somewhat foxy. Aug. 16.

Delaware. The standard of high quality among grapes—"as good as Delaware" is highest praise. Requires rich soil, good care and high cultivation. Bunch small, compact; berries small, light red, tender skin almost entirely free from astringency. Pulp tender, juicy, sweet, delicately flavored, delicious. Seeds small, parting readily. Hardy in vine.

Wyoming Red. One of the best early grapes from East to West and South. Growers report it larger than Delaware, fine foliage, succeeds where Delaware fails; very early, ripening about with Diamond. Bunch small, compact and handsome; berries small to medium, sweet, somewhat foxy, but very agreeable. Skin bright red, thick, firm. Strong grower, perfectly hardy.



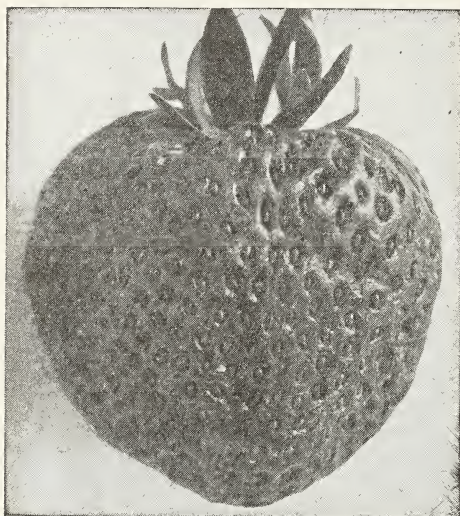
August Luther

Strawberries

The Soil and Its Preparation. The ground should be worked 18 or 20 inches deep, and be properly enriched as for any garden crop; drainage is necessary in very wet soil.

Cultivation. For family use, plant 15 or 18 inches apart each way, and after a few strong plants have set from runners, then pinch off all runners as fast as they appear; keep the ground free of weeds, and frequently stirred with a hoe or fork. Plants treated in this manner will produce more crowns and yield therefore double the amount of well-developed fruit than when runners are left to grow.

Covering in Winter. It is well to give the ground a light covering with coarse straw or litter. This covering should not be put on until the ground is frozen. Fatal errors may be made by putting on too much and too early. If coarse straw is used, it may be left on until the plants have done fruiting, taking care to open it up around the plants early in the spring, so as to give them plenty of sunlight and air.



Senator Dunlap

Senator Dunlap. (Per.) This berry has been very highly recommended since its introduction in 1900, and growers of it have not been disappointed. In all localities where it has been planted we hear nothing but praise for the Senator Dunlap. It sends out many runners and should have plenty of room. The plant is perfectly healthy and an enormous bearer. It commences to ripen soon after the earliest and continues until near the close of the season. The fruit is large, but not the largest, and conical in form. The color is a deep, rich red, the flesh is also red, and has a sprightly, delicious flavor. This variety is grown largely as a commercial berry. Two hundred bushels per acre is not an uncommon yield.

August Luther (S) We believe this to be the best early strawberry grown. We have tested nearly all the early varieties and recommend August Luther to be far ahead of any other early berry now generally grown. It is prolific, comes early and continues to bear till practically every berry reaches a good size. Fruit is very uniform in size and shape. Plants are healthy and make good row. The fruit is of good size, roundish, bright red, firm and very easily picked. It succeeds best on rather light soil. The fact is we have found by experience that the early varieties do best on light soil. We would advise all our customers and friends to set August Luther for early berries.

Aroma. (S) This is the best and most profitable late strawberry. Aroma is known all over the country as the finest and most profitable of the very late varieties of strawberries. We will guarantee the fruit of Aroma to please all who give it a fair trial. It cannot well be beaten for quantity of fruit produced or in quality of fruit. Plants show no weakness of any kind. Fruit very large, roundish, conical, rarely misshapen, glossy red, of excellent quality and produced in abundance. Aroma will please you. It is the best late strawberry grown.

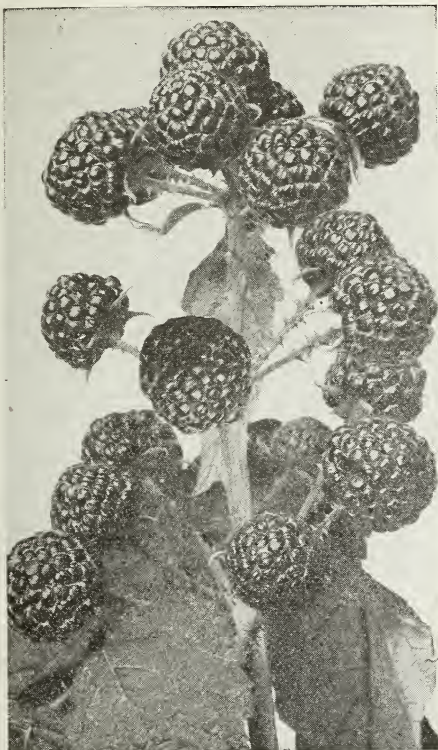
Warfield. (P) This is the grand berry for main crop, both for home use and market. We recommend Warfield fertilized with Senator Dunlap for most profitable strawberry crop you can grow, if you have a good market for medium early berries. Warfield is and has been the leader for years. Fruit is regular shape, dark red and a splendid shipper. We sell more plants of this than of any other variety excepting Senator Dunlap. Resembles Wilson, but is a heavier bearer and better plant maker, and better shipper. Plants are small, more like Crescent; requires a strong staminate about every other row for best results. We recommend to all for profit. It is, and has been for years, one of the standard varieties. Warfield is extra fine for table and canning. The dark red color clear through makes it a very desirable home use berry. Warfield will please you in every way.

Fall-Bearing Strawberries

Of course you like strawberries, and as often as you can get them. For a long time fall-bearing strawberries have been advertised, but many of them have been in the nature of erratic sports of old varieties that were not worth while, as they did not bear heavily enough to pay for the effort. By repeated crossing of varieties, however, it has gone beyond the questionable stage. You must, however, bear in mind that strawberries are over 90 per cent water, and if the summer is hot and dry the berries will not be plentiful or of good size unless they get sufficient moisture.

Raspberries

Cumberland. Undoubtedly the best, most profitable of all blacks—"The Business Blackcap." Strong, thrifty grower, hardy, immensely productive, remarkably free from insect attack and disease. Berries the very largest, specimens often measuring from $\frac{3}{4}$



Cumberland

to 1 inch in diameter. Juicy, highly flavored, few seeds. Glossy, jet black; firm—handles well, ships well. In our estimation, no other blackcap of the season should be planted—superior to all others for home use and market. June 20.

Kansas. (Black) Good variety for market or home use. Does well everywhere. Strong, vigorous and hardy. Berries large, very black, firm, good in appearance and of the best quality. We have fruited it a number of years and know its value.

Gregg. (Black) An old favorite and one of the best late varieties. Berries large, black, with heavy bloom, very firm, very productive and a good shipper.

Cardinal. (Purple) A vigorous grower, leaves hanging until late in the fall. Does not sprout. Propagated from tips. Said to be the most hardy raspberry grown. Berries very large and purple. Splendid for home use.

Cuthbert. (Red) The leading late red raspberry. A very strong grower; very productive; fruit large, and of extra fine quality. This variety is probably planted

in larger quantities for market purposes than any other red berry.

St. Regis Everbearing Red Raspberry

This was introduced several years ago by J. T. Lovett, of New Jersey. I did not take any stock in it, for I thought it was impossible for plants set out in April to bear ripe fruit in June, for an ordinary red raspberry bush will die back when transplanted in the spring, sending up new shoots from the roots. I have changed my mind since planting a few last spring, for those set out in April had quite a show of fruit in early summer and continued bearing until killed by frosts, the later crop coming on the tips of the new growth.

St. Regis is a sure-enough "everbearer" and quite distinct. The new canes do not die back after fruiting in the fall as second growth canes on ordinary varieties usually do, but keep green through the winter, bearing a full crop the following season. It is also very hardy, having withstood the hardest winters.

Blackberries

Mersereau. A good hardy variety. Mersereau is an early, mammoth, iron-clad blackberry. It originated in northwestern New York, where the mercury falls from 15 to 25 degrees below zero, and where it has stood in open field culture for many years without the slightest protection, never being injured in the least. In quality it is exceptionally sweet, rich, melting and luscious, being without core, the scedy character of Snyder and most other sorts is noticeably absent. As a shipper and keeper it is unsurpassed, remaining firm without "bleeding" in handling.

Eldorado. One of the best blackberries for the North. Berries large, jet-black, borne in large clusters and ripen well together; very sweet, melting and pleasant; have no hard core, and keep several days after picking with quality unimpaired. The vines are very vigorous and hardy. Enormous yield.

Snyder. Very popular in this section on account of its hardness and productiveness. Medium in size, fruit juicy and sweet. Canes very strong and thrifty; extensively planted. Berries firm enough for long shipment.

Dewberry

Lucretia. This is the standard variety. It is really a trailing blackberry, but ripening much earlier than most blackberries, beginning with the black raspberries. The fruit is juicy and palatable and is much in demand.

Currants

Red Cross. Originated by Jacob Moore, of New York, originator of Diamond and Moore's Early grapes and other valuable fruits. Very strong, vigorous, enormously productive. Yields two or three times as much as Cherry. Clusters long, well filled; berry deep red, large, often the size of Victoria, far superior in quality; highly flavored, sweet.

Wilder. Better grower than Cherry currant, far more productive, less subject to twig borers. Tall, vigorous, upright, slightly spreading. Bunches large, long and compact. Berries large, brilliant red, finest quality.

North Star. Strongest grower among the red varieties; should be given plenty of room and ground kept well enriched. Bunches average 4 inches in length and are freely produced. Combines extreme hardiness, vigorous growth, extra quality and great productiveness.

Gooseberries

Houghton. Most productive, best payer of all. New sorts are constantly offered, but as yet none have been able to wrest from this old stand-by its popularity. Berry rather small, light green, thin, tender skin, excellent quality; fruit grows so thickly along the branches that it can be stripped off in handfuls. Plant hardy, vigorous, less subject to mildew than all others. July 1.

Downing. A seedling of Houghton, following closely its parent in popularity. Large, almost twice the size of Houghton; very light green, soft, tender, good flavor. Extremely vigorous, hardy, prolific. July 10.

Josselyn (Red Jacket). Strong, vigorous grower, hardy, quite productive, almost free from mildew. Berries oblong, smooth, pale red when ripe; flesh tender, juicy, rich, highly flavored. Probably the best of the large-fruited American sorts. July 15.

Asparagus

This delicious vegetable should be found in every garden. Nothing can be more easily grown and no other plant will give so much good, healthful food for so little outlay.

Dig the soil deeply, and mix together with well-rotted manure. Plant in rows 3 feet apart. The plants should not exceed a foot apart in the rows and planted about 4 inches deep. On approach of winter, cover with manure and fork the beds over lightly in the spring. Always set good, strong, 2-year-old roots.

Conover's Colossal. A standard kind of first class quality. Tender and highly flavored; valuable market and garden sort.

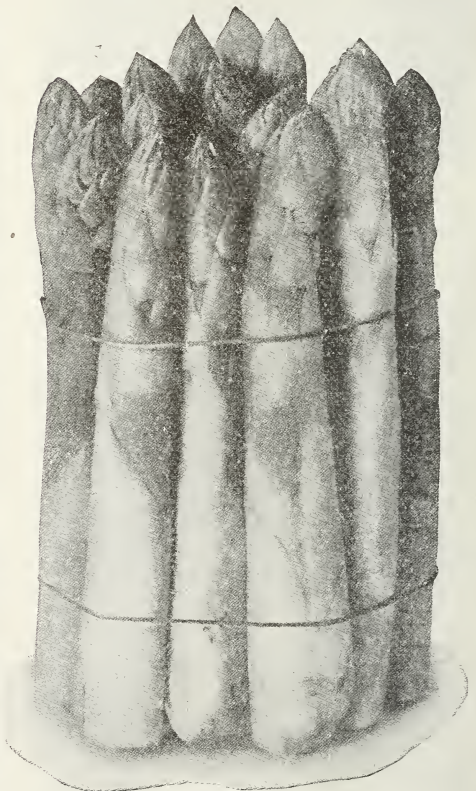
Palmetto. Probably a sport from Conover's Colossal. Some prefer it; produces a large stalk; rather pale color.

Rhubarb

Rhubarb ranks among the best early vegetables. It affords the earliest material for pies and tarts, continues long in use and is valuable for canning. Market gardeners generally pull some the first year, but it is well to give a full year of cultivation before using any of it. Plant the crowns a little below the surface. Manure heavily and cultivate well.

Linnæus. Very heavy stem and early; makes a rich cherry-colored sauce.

Victoria. Not so early as Linnæus; stalk longer and very heavy; there is little choice between these two varieties, and unless planted side by side the difference is hardly noticeable.



Asparagus



The home beautiful, in its setting of trees and climbing vines

The planting of well selected trees about the home gives it an added grace and charm, and is a duty each home owner owes to himself and posterity; and the sooner planted the longer both yourself and the public may enjoy them. Flowering shrubs are also valuable among the ornamentals, whether planted in masses or single specimens. They are indispensable in parks, and on the home grounds. In all decorative plans they have an important place. Without shrubbery it is impossible to create proper landscape effects, but with suitable trees, shrubs and flowers, any property can be very greatly enhanced both in beauty and cash value. Properly arranged, shrubbery does not encroach on the lawn; it rather gives it an appearance of greater length and width, and seemingly increases its size.

Ornamental Department

Hardy Shade Trees

Carolina Poplar. One of the most rapid growers among shade trees, frequently growing 8 feet during one season, and thus soon making plenty of good shade. It is very desirable at the roadside, in parks, along rivers and streams for the protection of the banks. It has advantages over other shade trees, because it will grow in any kind of soil, swampy or muck, light or heavy. It is easily started and gives shade in a short time. Very useful for planting as a screen to shut out unattractive buildings.

Maple, Norway. A native of Europe. A hard-wooded tree, moderately slow in growth but well worth the extra time, as it is the handsomest of all the maples. Very spreading, round head, stout, hardy, vigor-

ous. One of the most desirable of all shade trees for park or garden—rather too low-branching for street. Resembles Sugar Maple, but a more rapid grower with even handsomer foliage.

Catalpa Bungei. Of dwarf habit, forming a wide, spreading head, with drooping branches, resembling an umbrella.

Hardy Catalpa. (*Speciosa*) One of the most showy flowering trees. It makes a beautiful object on the lawn and should be in everyone's dooryard. It is a very rapid grower, and found to be very desirable for railroad ties, etc. Prof. Hussman, of the Missouri State Horticultural Society, describes it as follows: "It looks like a pro-



Catalpa Bungei

duction of the tropical zone, yet it seems to be entirely hardy, with its immense leaves, velvety brown when they first appear, and changing into dark green, followed by immense panicles of flowers containing sometimes between three and four hundred buds and blossoms, contrasting finely with its dark massive foliage."

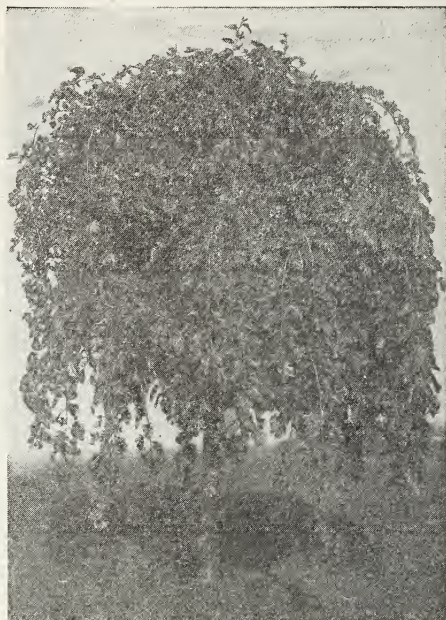
Maple, Schwedler's. (A. Schwedler.) The young shoots and leaves of this beautiful variety are a bright purplish and crimson color, changing to purplish green when the leaves get older.

Chestnut, American. (*Castanea Americana*). A large and beautiful well-known forest and nut-bearing tree. Few trees combine such vigor and grand stature, with so many other good qualities. Planted extensively for profit and ornamental purposes.

Horse-Chestnut, White-flowering (*Æculus Hippocastanum*). Is a very desirable tree for producing heavy shade, making it valuable for street planting. Produces an abundance of showy white flowers on erect panicles in early spring. Bears large inedible nuts.

Olive, Russian. An ornamental tree of special value, growing to a height of 30 feet or more. The bark and leaves are light green when young, the bark getting darker and the leaves more silvery white as the tree grows older. The blooms are in small racemes 3 inches long, with a sweet and spicy fragrance, and are borne profusely in June.

Salisbury (Maidenhair Tree or Ginkgo). A graceful and picturesque tree, with yellowish green leaves, curiously lobed and



Weeping Mulberry



Norway Maple



A Beautiful Drive—A Well Planned Avenue

marked with delicate hair-like lines. A valuable ornamental tree, and useful for street and avenue planting, and is generally free from insects and diseases.

Crimson-Leaf Plum (*Prunus Pissardi*). The handsomest crimson-leaf tree. Dwarfish grower, very distinct and beautiful foliage. Young branches are a dark reddish purple; the leaves, when young, bright crimson, changing to a reddish purple later. Leaves remain until early winter, retaining their color to the last. Bears a few medium size plums of fair quality, also deep crimson. Valuable as an ornamental, rather than as a producer of fruit.

Purple Fringe (Smoke Tree). A shrub or small tree of spreading habit, covered in

midsummer with a profusion of dusty, fringe-like flowers. Very much admired and desirable for the striking peculiarity of its flowers.

Crab Apple, Bechtel's Double-flowering (*Pyrus coronaria* fl. pl.). The finest of the many beautiful varieties of the Flowering Crab Apples. Tree of medium size, covered in early spring with large, double, fragrant flowers of a delicate pink color, having, at a distance, the appearance of roses. It is without doubt one of the handsomest trees grown.

Weeping Mulberry. A very hardy tree of graceful form; forms an umbrella-like head and slender branches, drooping to the ground; foliage small and glossy green.

Evergreens

"The Storm King quarreled with Nature one day; with the cold fire of his breath he devastated her children of the forest, her flowers of the dells, the vines of the fens and the sweet grasses of the valleys, destroying them all in his ruthless fashion. And then Nature produced the evergreen that its vivid plumes may forever wave defiance to the North King and gladden the eye of man through the dreary months of winter."

Black Hills Spruce. A handsome tree with slender, graceful, drooping habit when tree attains 15 to 20 feet in height. Valuable for cold climates and light dry soils. A deep green in color, retained the year around. Will stand hard conditions. A native of the Black Hills, where they grow on the high hills and mountains among the rocks, and

where it is difficult to understand how they exist and grow.

Spruce, Norway. This familiar Spruce is more generally useful than any other variety. It is a lofty tree of pyramidal habit and very elegant and rich. With age it has fine, graceful, pendulous branches; very popular as an evergreen hedge. Is very picturesque and beautiful.

THINGS WORTH WHILE AND SOME SUGGESTIONS

White Pine. A grand old favorite and the most ornamental of all our native pines. The foliage is light, delicate or silvery green. It withstands hardships and grows in the most barren soils.

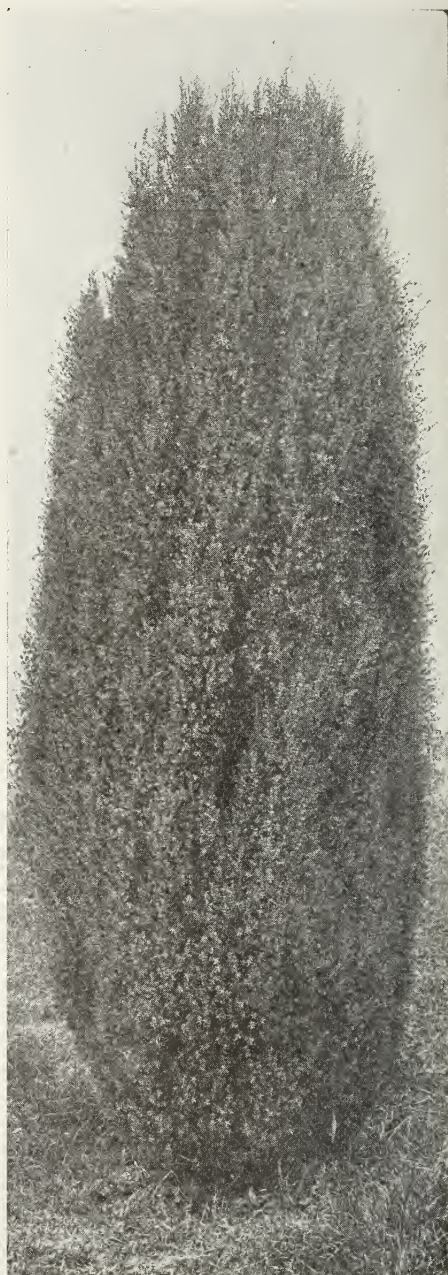
Pyramidal Arborvitae. Similar to the American, having dark green, compact foliage and very erect form. It is perfectly hardy. The most beautiful variety, and well adapted for formal planting and lawn specimens.

Irish Juniper. Erect, dense, conical, resembling a pillar of green; very ornamental.

The trees were all O. K. Find enclosed check for same. CHAS. E. KELLER,
Maitland, Mo.



Norway Spruce



Irish Juniper



Hydrangea

Hardy Shrubs

Purple-Leaved Barberry. A beautiful shrub with violet purple foliage; showy, small yellow flowers, and beautiful red berries in pendulous clusters.

Elder, Golden (*Sambucus nigra aurea*). A handsome shrub, with golden yellow foliage and clusters of pure white flowers. Excellent for lawn planting.

Elder, Cut-Leaved (*S. nigra laciniata*). The foliage of this variety is deeply cut and incised, lending an airy, fern-like aspect. Very vigorous growth.

Elder, Red Berries (*S. racemosus*). Produces white flowers in May, followed by red fruit. Very hardy.

Elder, Variegated-Leaved (*S. nigra variegata*). A lardy, variegated species. Makes a fine and showy appearance.

Euonymus Americanus (Strawberry Bush). Very ornamental and showy, its

brilliant dark red berries, which hang in clusters from the branches until mid-winter, is its chief beauty. The contrast is very fine when planted with a background of evergreens. Leaves scarlet in autumn.

Euonymus Longipes. A handsome shapely, silver-leaved shrub, with reddish branches in winter; perfectly hardy and of easy growth with bright yellow flowers in June. The greatest value of this shrub is in the fruit, which is produced in great abundance along the whole length of the branches; it is oval in shape, about $1\frac{1}{2}$ inches long and of a deep orange-red color.

Hydrangea (*Paniculata Grandiflora*). From July to November there is no shrub more showy than this favorite Hydrangea. Its large, showy panicles of white flowers hang in the greatest profusion. It is quite hardy and very beautiful planted as a single specimen on the lawn or in the margin of masses. Prune severely in the spring to produce the largest flowers.

Hardy Climbing Vines

Ampelopsis Veitchii (Boston Ivy; Japan Creeper). The most popular ivy for covering buildings and walls. Foliage is smaller than the American and more dense, forming a sheet of green. The plant is a little tender when young and should be protected the first winter; when once established, it grows rapidly, the tendrils holding tenaciously to any support. The foliage changes to crimson in fall, which makes it a very beautiful ornament to a brick or stone structure.

Honeysuckle, Monthly Fragrant. Very sweet, red and yellow flowers all summer.

Honeysuckle, Hall's Japan. A strong, vigorous grower, with pure white flowers, changing to yellow. Very fragrant.

Engelman Ivy. Choice variety, with small, glossy green foliage, and disk-like tendrils, which enable the vines to attach themselves to stone and woodwork. Particularly desirable where the Boston Ivy is not sufficiently hardy, or where a more rustic effect is desired.

Wistaria. A rapid-growing, tall vine, with handsome foliage and flowers, which are produced in long, pendulous clusters of a pale blue color. It is very hardy and one of the most superb vines ever introduced.

Trumpet Flower. A splendid and hardy climber, with large trumpet-shaped scarlet flowers in August.

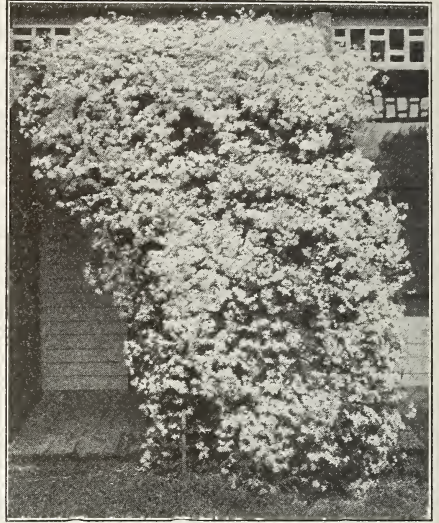
Clematis

Henryi. Most beautiful white of the large flowering sorts. Strong, rapid grower, an extremely profuse bloomer; flowers large, frequently measuring from 5 to 6 inches in diameter, snowy white with deep orange center.

Jackmani. One of the first of the hybrids introduced and still stands as the most popular. Of its color the most valuable variety known; blossom very large, 4 to 6 inches in diameter, a deep, rich, velvety, violet-purple; plant hardy, vigorous and profuse bloomer; in flower from June till September.

Madame Andre. Similar to Jackmani in all respects, except the blossom is a deep, rich crimson—distinct and novel; the only clematis among the large flowering sorts that is truly a crimson shade. Not quite so profuse a bloomer as Jackmani, but in flower all during the season.

Paniculata. Entirely distinct from the large flowering sorts listed above, just as beautiful and valuable in its way. Was introduced from Japan and has proved a wonderfully



Clematis Paniculata

valuable acquisition in this country and has already become exceedingly popular. Remarkably vigorous, often making a growth of from 15 to 20 feet in a season; perfectly hardy, remarkably free from insect attack and disease. Blossoms are small, usually from $\frac{1}{2}$ to $\frac{3}{8}$ of an inch in diameter, with 4 petals; creamy white, deliciously fragrant and borne in dense masses, lasting for several weeks. Leaves rather small, dark, glossy green, a handsome plant even out of bloom. For porches, trellises, etc., no other vine is more beautiful and satisfactory. Blooms in late August.

Deciduous Hedge Plants

Privet. The most popular and universally planted deciduous hedge. Plant 8 to 12 inches apart and keep cut back well after the first year. When trained well is one of the most ornamental hedges for lawns and cemeteries.

California Privet. The best of all ornamental hedges; holds its luxuriant, glossy green foliage from early spring to about mid-winter; makes a dense, compact growth and can be trained to desired height. In many cities it is planted extensively to divide one lot from another, also in front adjacent to the street, and when kept properly trimmed produces a most beautiful and striking effect.

Barberry, Thunberg's (*Berberis Thunbergii*). From Japan. Pretty species, of dwarf habit, small foliage, changing to a beautiful coppery red in autumn. Valuable as an ornamental hedge.

Roses

American Beauty. An everblooming hybrid perpetual. The flowers are very large, of beautiful form and very double; deep rich rose color. Its fragrance resembles La France. This is the most popular rose grown.

General Jacqueminot. Hybrid Perpetual. So popular and well known as to scarcely need description. One of the hardiest, most vigorous and satisfactory. Large, semi-double, delightfully fragrant: deep velvety crimson—brilliant and effective; cannot fail to delight every lover of the deep red rose, of which it is one of the finest in all respects.

Gruss an Teplitz. Hybrid Tea. Among the many sorts of recent introduction, has shown itself one of the very best. Very vigorous, rugged, succeeding under the most ordinary conditions. "The reddest of all red roses"—richest scarlet, shading to a velvety crimson as the flowers mature; medium size, very double, very fragrant. A free, strong grower, and surpassingly profuse in bloom. Foliage very handsome, all the younger growth being of a bronzy plum color. We recommend this rose in every respect. "The most constant bloomer that we have; perfectly hardy, vigorous, very valuable; practically free of the susceptibility to rain that makes Clothilde Soupert so uncertain. Color unusually good." — Wm. Trelease, Mo. Bot. Gardens.

Crimson Rambler. Polyantha. Almost as popular as it deserves—undoubtedly the most vigorous, hardy climber. Very strong, rapid grower, and in blooming season (early in June) is simply a mass of rich, deep crimson from the ground to the tips. Flowers semi-double, small, 1 to 1½ inches in diameter, borne in immense clusters of from 25 to 50 blossoms each. For several years has had a larger sale than any other rose and in nearly every case has proven highly satisfactory. For training on pillars, porches, etc., is unsurpassed. We cannot say too much in its favor.

Dorothy Perkins. Hybrid Wichuriana. In many respects quite similar to Crimson Rambler, but flowers are very double, larger, frequently 2 inches across, and a most beautiful shell pink; very fragrant, which is unusual with the Rambler class. Flowers

borne in clusters of from 30 to 40, or frequently more, and hold the petals well after cutting; buds pointed, very handsome. As strong a grower, as vigorous and hardy as Crimson Rambler.

Frau Karl Druschki. H. P. White. (Snow Queen). Very large, perfect form and snow white; long, pointed buds; a vigorous grower and free bloomer. The best hybrid perpetual yet introduced.

I received the trees and am well pleased with them. Am sending you check for same. I remain, Yours,

C. G. BOSTWICK, Craig, Mo.



Dorothy Perkins

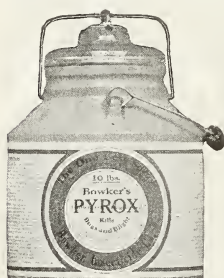
Spraying Materials

Nearly every large manufacturer of spraying chemicals in the United States has sent me his printed matter setting forth the merits of his products, most of which, no doubt, are all right; however, I believe, from my experience with quite a number of them and from observation of others, that some preparations are MUCH BETTER than others. After a good many years of experimental work along this line I have settled down to the use of two lines of products, viz.: those of the Bowker Insecticide Company and the Grasselli Chemical Company. I have used these compounds and know that they can be relied on. There are no better spray materials on the market—if, indeed, there are any others quite so good—as Bowker's Pyrox and Grasselli's Arsenate of Lead and Lime-Sulphur Solution.

I have been handling these materials, and they have given such universally good satisfaction that I have decided to keep them in stock so I can supply the needs of our patrons without delay. Parties who expect to use large quantities, however, should order in advance, as I shall aim to get the material in fresh, and just in sufficient quantities for a season's run. If you will need 100 pounds or more, let me have your order early. We will take care of it until you are ready to use it. Will be pleased to quote you prices on large or small quantities.

Pyrox

Bowker's "Pyrox" kills the codling moth worm, canker worm, tent caterpillar, and similar pests, and at the same time prevents damage by apple scab and fungus. On grapes, it prevents injury by the grape-root worm, the rose bug and mildews and rot. It is spoken of by fruit-growers as the "One Best Spray," and is a combined poison and fungicide, which needs only to be mixed with cold



water to prepare it for use. It adheres to the leaves in effective condition for months in spite of heavy rains, and respraying is unnecessary except to protect the new growth as it comes along.

Five gallons of spray at an application is sufficient for a fair-sized apple tree. For codling moth, bud moth, canker worm, tent caterpillar, apple scab, pear blight, brown-tail moth, apply 1 pound in 6 gallons of water if a hand or barrel sprayer is used, 1 pound in 7 to 10 gallons of water (depending on the pressure) if a power sprayer is used. First spraying of fruit trees just before the blossoms open. Second spraying when about three-quarters of the petals have fallen.

Those who use Pyrox send more fruit to market and less to the cider mill.

Pyrox, for the small garden, is just as valuable as for the orchard or potato field. It kills bugs and blight wherever used.

Pyrox not only kills potato bugs, but increases the crop yield by keeping the vines green and healthy.

Grasselli Arsenate of Lead

Grasselli Arsenate of Lead. Kills leaf-eating insects. Mixes readily with water. Sticks to the foliage. Grasselli Arsenate of



Lead is used to destroy leaf-eating insects such as Codling Moth, Curculio, Canker Worm, Tussock Moth, Elm Leaf Beetle, Gypsy and Brown Tail Moths, Potato Beetle and similar insects that

feed on the foliage or fruit of fruit trees, shade trees, vegetables, flowers and shrubbery. As a general rule to destroy these insect pests, use from 2 to 6 pounds Grasselli Arsenate of Lead Paste to 50 gallons of water.

Grasselli Lime-Sulphur

Grasselli Lime Sulphur Solution is used as a summer spray to control Scab, Leaf Spot and similar fungous diseases on apples and pears.

On apple and pear foliage, it should not be used stronger than 1½ gallons to 50 gallons of water. Some prefer 1¼ gallons to 50 gallons of water.

Lime Sulphur Solution as a summer spray replaces Bordeaux Mixture. The use of Lime Sulphur Solution and Bordeaux Mixture in same application is unnecessary.

Lime Sulphur Solution is also used as an insecticide to control San Jose Scale, Blister Mite and similar sucking or scale insects. For this purpose it is used at a dilution of 1 gallon to 9 gallons of water and applied during the dormant season, either after the leaves drop in the fall or before the buds open in the spring.

Expressions of Satisfaction

University of Missouri, Columbio.
Department of Horticulture.

Dear Mr. Murray: Prof. Whitten has handed me your letter of Mch. 31st, and I am pleased to acknowledge receipt of the shipment of apple trees. They arrived in good condition. We desire to plant these in our new experimental orchard.

Thanking you for your promptness, I remain, Yours very truly,

W. L. HOWARD.

I received the trees all O. K., and was well pleased with them. You will find enclosed a check for \$20.50 for the amount. Yours truly,

J. W. ZIMMERMAN.

Sugar Grove Farm, Savannah, Mo.

I received trees all right; was well pleased with them; never received a better bunch of trees. The express was only 40 cents. I am sending check for payment. Thanking you for prompt attention, I remain,

Yours respectfully,

A. F. BLAIR, Rosendale, Mo.

I received my bill of nursery stock and was well pleased with it. Please find enclosed check for amount of same. Thanking you, I remain, Yours,

ALEX MEYER.

Mound City, Mo.

I was so well pleased with the trees received from you last year that I wish a price list again of your nursery stock.

Respectfully yours,

C. F. EDWARDS, Rea, Mo.

Enclosed find check to cover bill of March 31st. Think all the grapes and trees are starting. Thanks for the Delicious tree. Respy.,

GEO. W. MEYER,

Mound City, Mo.

I received the order and they look fine; but you have overlooked the six Burbank plums. Please send them soon. I wish to thank you for your careful attention. Yours respy.,

JOSEPH FRIES,

Mound City, Mo.

I received the trees you sent me all right and was pleased with them, as they were nice, thrifty trees. I enclose you a check for \$10.00. Respectfully yours,

WM. NAUMAN, Craig, Mo.

Bill of trees arrived all O. K.; but I find that I need four more apple trees and one more apricot. If you think it is not now too late, please send them. I want a good winter apple. Yours truly,

H. O. SLY, Fairfax, Mo.



CALIFORNIA PRIVET



WHY not make home just as beautiful and attractive as it is possible to make it? We have but a short span here at best; and the place where we live should be something more than a house—a dwelling—a place of abode. It should be a "home" in the truest sense, where God and nature bid man spend his days at useful toil, and his nights in restful dreams of a life well spent.